DEPARTMENT OF THE ARMY
SAVANNAH DISTRICT, CORPS OF ENGINEERS
PIEDMONT BRANCH
1590 ADAMSON PARKWAY, SUITE 200
MORROW, GEORGIA 30260-1777

JUL 0 8 2009

Regulatory Division
200700388

JOINT PUBLIC NOTICE
Savannah District/State of Georgia

The Savannah District has received an application for a Department of the Army Permit, pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), as follows:

Application Number: 200700388

Applicant: Hall County
Attention: Mr. Tom Oliver
Drawer 1435
Gainesville, Georgia 30503

Agent: Wm. Thomas Craig
1144 College Avenue
Post Office Box 1587
Covington, Georgia 30015

Location of Proposed Work: The proposed project is located at Latitude 34° 25' 30" North and Longitude 83° 43' 52" West, 1 ¼ miles east of the intersection of Clarke Bridge Road and Glades Farm Road, approximately 12 miles northeast of the City of Gainesville, in Hall County, Georgia. Please see the attached Location Map of the Glades Reservoir (Figure 1).

Description of Work Subject to the Jurisdiction of the US Army Corps of Engineers: Hall County proposes to construct a traditional water supply reservoir on Flat Creek, to be known as the "Glades Reservoir". The project as proposed consists of constructing an 850-foot long dam that would create an 850-acre reservoir pool with a maximum depth of 116 feet. The normal pool elevation for Glades Reservoir is designed for 1,180' mean sea level (msl). Hall County has projected that there will be an unmet, average water demand, within the portions of Hall County within the Upper Chattahoochee River Basin, of 6.5 million gallons per day (mgd) in the year 2060. As proposed in the reservoir operating rules listed below, the applicant states that the Glades Reservoir would be capable of providing Hall County residents with an average annual safe yield of 6.4 mgd at the proposed design dimensions. Hall County has indicated that future water conservation measures should provide the remaining (0.10 mgd) unmet demand for

2060. The Georgia Department of Natural Resources, Environmental Protection Division provided a letter, dated June 5, 2009, to the applicant concurring with the project's proposed unmet need for the target year 2060.

Hall County proposes to release water from Glades Reservoir into Flat Creek, where it would then flow into Lake Sidney Lanier (Lake Lanier). Once reaching Lake Lanier, the water would be withdrawn at the existing City of Gainesville's Lakeside Intake for treatment and distribution. The City of Gainesville would expand the Lakeside Water Treatment Plant to handle the additional proposed 6.4 mgd of water, but no expansion of the existing water intake structure is proposed as part of this project (Figure 3). No additional impacts to aquatic resources are anticipated associated with the upgrade of the Lakeside Water Treatment Plant.

As proposed by the applicant, the Glades Reservoir is comprised of two volume components: 1) a 6.4 mgd safe yield based on previous drought condition records; and, 2) an additional volume provided as a contingency for severe drought conditions.

According to the applicant, the Glades Reservoir Project would provide 6.4 mgd safe yield of water supply during normal years as well as satisfying the projected unmet water demand during drought conditions in the service area of Hall County for the projected population growth through the year 2060. The applicant conducted a safe yield analysis to meet water supply for drought conditions similar to droughts of 1954 to1957, 1986 to1988 and 1999 to 2001. The applicant selected coincident flow values recorded in Suwanee Creek (as provided by USGS gage data) for the 1986 to 1988 drought and 1999 to 2001 drought to compare with flow values recorded in Flat Creek from July 2001 through July 2002. According to the applicant, because flow values were considered to correlate reasonably well, Suwanee Creek was selected to simulate flows in Flat Creek for the safe yield analysis. A 20-year analysis period, based on water years October 1, 1984 through September 30, 2004, was used for the yields analysis.

As part of the safe yield analysis, the applicant incorporated GAEPD's approved site-specific instream flow study option that allowed the use of the annual 7Q10 as the minimum dam release flow. In accordance with the USGS Water Resources Investigational Report 89-4056 (entitled "Low Flow Profiles of the upper Chattahoochee Rive and Tributaries in Georgia', dated 1989), the annual 7Q10 for Flat Creek was 4.6 cubic feet per second (3.0 mgd). For each day in the analysis period, the lesser of the natural reservoir inflow or the minimum instream flow (MIF) (3.0 mgd) was projected to be released from the reservoir.

For the purpose of the safe yield analysis "drought conditions" were assumed to have occurred during the calendar years of 1986, 1987 and 1988 and the calendar years of 1999, 2000 and 2001, and the subsequent years of each drought until the reservoir and normal baseflow could recover. According to the US Army Corps of Engineers Mobile District, Lake Lanier's conservation pool storage is 1,087,600 acre-feet in the summer and 1,049,400 acre-feet in the winter. The applicant concluded that Lake Lanier's conservation pool storage would be

supplemented with 33,588 acre-feet of conservation pool storage in the Glades Farm Reservoir. During periods when releases from the proposed reservoir for MIF and water supply exceed the inflow, the Glades Farm Reservoir level would be drawn down. During higher flows, spillage from the proposed reservoir would be delayed until the reservoir reached its conservation pool elevation. The applicant determined that the increased conservation pool storage with the addition of the Glades Farm Reservoir would increase the capacity for minimum flow.

In addition to Hall County's analysis of the safe yield of 6.4 mgd, the proposed reservoir includes additional capacity for a contingency. The rationale for the additional storage has been described by the applicant as a contingency to protect Hall County in times of severe drought and unpredictable weather patterns. The applicant has stated that a contingency is needed because modeling of the drought of record alone has not provided a consistent planning tool to appropriately size reservoirs within North Georgia. The applicant will supplement its application with a report further explaining the rationale and methodology behind the contingency storage prior to the expiration of the comment period.

In conducting the safe yield analysis, the applicant proposes several operating rules by which the Glades Reservoir would function: (1) The Minimum Instream Flow (MIF) to be released from the reservoir would be the lesser of 3.0 mgd (4.6 cubic feet per second) or the inflow to the reservoir; (2) An additional release for water supply would begin initially at zero and eventually increase to 6.4 mgd (9.9 cubic feet per second) as Hall County grows and needs more water supply for its citizens. The water would be released into Flat Creek and travel through Lake Lanier where it would be withdrawn from Lake Lanier at the existing City of Gainesville water intake to be treated and distributed to Hall County water users; (3) All streamflows entering Glades Reservoir that exceed the MIF and the water supply release would be released to Flat Creek downstream of Glades Reservoir when the reservoir is at normal pool; and (4) The reservoir would be operated so as to limit the reservoir draw down to no more than two feet from the Conservation Pool elevation of 1,180' msl for no more than 90 percent of any calendar year and no more than 10 feet during any other time, with the exception of declared emergency drought conditions during which period no drawdown limitations would be applicable. According to the applicant, an emergency means a drought condition declared by the Governor, the GAEPD, or any other appropriate governmental entity that has jurisdiction over the Reservoir, the threat or actual occurrence of which is of sufficient severity and magnitude to warrant the need of additional water from the Reservoir in order to alleviate human hardship or suffering caused thereby.

Proposed Project Impacts: The proposed design of the Glades Reservoir would impact approximately 92,264 linear feet of perennial, intermittent, and ephemeral streams and 27.40 acres of wetlands, associated with the construction of the dam and the inundation of resources within the reservoir's normal pool footprint (1,180' msl). Please see the attached maps of the jurisdictional waters within proposed reservoir footprint (Figures 4A-4E) for specific locations of jurisdictional impacts.

Safe Yield Project Impacts: The impacts associated with the safe yield reservoir of 6.4 mgd (along with 25% dead pool storage) would impact approximately 39,039 linear feet of perennial, intermittent, and ephemeral streams and 22 acres of wetlands, associated with the construction of the dam and the inundation of resources within the reservoir's safe yield pool footprint (1,130' msl). The safe yield pool would provide for approximately 2.64 billion gallons of water. The above yield value is based on EPD's currently accepted method of computing safe yield. The applicant states that if climate changes lead to more extreme drought events, this alternative would not be capable of meeting the project purpose.

Alternative Analysis: The applicant provided a preliminary alternative analysis that evaluated the practicability of offsite alternatives, onsite alternatives, and the no action. Offsite alternatives included: implementation of water conservation; recycling and reuse of wastewater; expansion of groundwater (wells); purchasing of water from existing or proposed sources; requesting increased withdrawal at existing intake site; construction of a flow augmentation reservoir in uplands; construction of several reservoirs; construction of a river or stream intake system (no storage reservoir); construction of a river or stream intake with one storage reservoir (augmentation reservoir); construction of several intakes with storage reservoirs; an increase in the size/yield of an existing or planned reservoir; continued use of the existing water system with construction of a smaller reservoir; construction of a traditional reservoir on Mud Creek (in Hall and Habersham counties); and, construction of a traditional reservoir on Hagen Creek (in Hall County). Then, the applicant provided an array of onsite alternatives, including the combination of water conservation with the preferred alternative; combination of groundwater use with the preferred alternative; a reduction of the size of the reservoir of the preferred alternative; and, the construction of the preferred alternative with an adjacent water treatment plant (i.e., direct withdrawal from the Glades Reservoir). USACE has independently identified the 6.4 mgd safe yield reservoir (along with 25% dead pool storage) as an additional alternative. Additional details regarding the applicant's proposed alternative analysis can be found on our Web Site at https://sasweb.sas.usace.army.mil/jpn/Attachments/200700388alternativesanalysis.pdf.

Compensatory Mitigation Plan: The applicant has also provided a conceptual mitigation plan to compensate for the loss of 92,264 linear feet of stream and 27.40 acres of wetlands. The applicant proposes to implement the following measures: 1) Priority 2 and Priority 4 stream restoration and riparian restoration (50 foot buffer on both sides of the stream) of 4,981 linear feet on Hagen Creek (approximately 2 ½ miles east of the reservoir site); Riparian enhancement (50 foot buffer on both sides of the streams) of 25,777 linear feet of tributaries to Hagen Creek and the Chattahoochee River; 3) Riparian preservation (50 foot buffer on both sides of the streams) of 107,792 linear feet of stream throughout the local watershed; and, 4) Purchase the equivalent of 27.40 acres of wetland mitigation credits from an approved mitigation bank that services the project area. Please see the enclosed maps (Appendix B.1 through B.2.vi) of the compensatory mitigation plan for more specific information and locations regarding the above proposed measures. Additional details regarding the applicant's proposed mitigation plan are at https://sasweb.sas.usace.army.mil/jpn/Attachments/200700388mitigationplan.pdf.

Conclusion: If the proposed plan is determined to be the least environmentally damaging practicable alternative, the applicant will need to secure from Mobile District, all appropriate authorities/contracts (i.e., Consent to Easement Structures and water storage contract in compliance with the Water Supply Act of 1958). The applicant will need to secure these approvals and provide evidence to the Savannah District, demonstrating that all legal obligations have been met prior to commencement of any work in waters of the United States.

BACKGROUND

This Joint Public Notice announces a request for authorizations from both the US Army Corps of Engineers and the State of Georgia. The applicant's proposed work may also require local governmental approval.

STATE OF GEORGIA

Water Quality Certification: The Georgia Department of Natural Resources, Environmental Protection Division, intends to certify this project at the end of 30 days in accordance with the provisions of Section 401 of the Clean Water Act, which is required by an applicant for a Federal Permit to conduct an activity in, on, or adjacent to the waters of the State of Georgia. Copies of the application and supporting documents relative to a specific application will be available for review and copying at the office of the Georgia Department of Natural Resources, Environmental Protection Division, Water Protection Branch, 4220 International Parkway, Suite 101, Atlanta, Georgia 30354, during regular office hours. A copier machine is available for public use at a charge of 25 cents per page. Any person who desires to comment, object, or request a public hearing relative to State Water Quality Certification must do so within 30 days of the State's receipt of application in writing and state the reasons or basis of objections or request for a hearing. The application can also be seen in the Savannah District US Army Corps of Engineers, Regulatory Division, Piedmont Branch, 1590 Adamson Parkway, Suite 200, Morrow, Georgia 30260.

State-owned Property and Resources: The applicant may also require assent from the State of Georgia which may be in the form of a license, easement, lease, permit, or other appropriate instrument.

US ARMY CORPS OF ENGINEERS

The Savannah District must consider the purpose and the impacts of the applicant's proposed work, prior to a decision on issuance of a Department of the Army Permit.

Need: To provide public water supply to meet a projected 50-year demand during drought conditions in Hall County.

Basic Project Purpose: To provide sufficient drinking water supply for Hall County.

Preliminary Determination of Overall Project Purpose: To provide a sufficient safe yield for Hall County's unmet water demand in the year 2060.

Cultural Resources Assessment: Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, we request the Georgia Historical Preservation Division (GAHPD) or any other interested party review the latest published version of the National Register of Historic Places (NRHP) to determine if the property has or has not any registered properties or properties listed as eligible for inclusion located at the site or in the area affected by the proposed work.

The applicant has completed a Phase I Cultural Resources Survey for this project. USACE has reviewed the survey report and made an initial determination of affect in compliance with Section 106 of the National Historic Preservation Act of 1966. USACE has initiated coordination with GAHPD by requesting their review and comment on the Phase I Cultural Resources Survey report and USACE's review comments.

Endangered Species: Pursuant to Section 7(c) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.), we request from the US Department of the Interior, Fish and Wildlife Service and the US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, or any other interested party, information on whether any species listed or proposed for listing may be present in the area. USACE has made a preliminary determination that there would be no effect to threatened or endangered species.

Public Interest Review: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and in general, the needs and welfare of the people.

Consideration of Public Comments: The US Army Corps of Engineers is soliciting comments from the public; federal, state, and local agencies and officials; Native American Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the US Army Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality,

general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Public Hearing: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application for a Department of the Army Permit. Requests for public hearings shall state, with particularity, the reasons for requesting a public hearing. The decision whether to hold a public hearing is at the discretion of the District Engineer, or his designated appointee, based on the need for additional substantial information necessary in evaluating the proposed project.

Comment Period: Anyone wishing to comment on this application for a Department of the Army Permit should submit comments in writing to the Savannah District, US Army Corps of Engineers, Piedmont Branch, Attention: Mr. Justin Hammonds, 1590 Adamson Parkway, Suite 200, Morrow, Georgia 30260-1777, no later than 30 days from the date of this notice. Please refer to the project name: Glades Reservoir, USACE Project Number 200700388.

If you have any further questions concerning this matter, please contact Mr. Justin Hammonds at (770) 904-2365.

5 Enclosures
Figure 1: Location Map of the Glades Reservoir (1 page)
Figures 2A-2B: Preliminary Dam Design for Glades Water Supply Reservoir (2 pages)
Figure 3: Proposed Intake and Raw Water Treatment Plant Map (1 page)
Figures 4A-4E: Jurisdictional Waters Maps (5 pages)
Appendix B.1-B.2.vi: Mitigation Maps (7 pages)